# WORK PLAN MEMORANDUM

## R E M II

# PERFORM[illegible]EMEDIAL RESPONSE ACT[illegible] UNCONTROLLED HAZARDOUS WASTE SITES

## U.S. E[illegible] CONTRACT NO. 68-01-6939

CAMP DRESSER & McKEE INC.
PRIME CONTRACTOR

REGION V

# Work Plan Memorandum for Skinner Landfill, West Chester, Ohio

Document Number 130-WP1-WM-AKVE-1

October 1984

**CDM**
*environmental engineers, scientists, planners, & management consultants*

CAMP DRESSER & McKEE INC.

11 East Adams Street, Suite 1500
Chicago, Illinois 60603
312 786-0253

October 15, 1984

Mr. Richard E. Bartelt
Regional Project Officer
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Mr. Gene Wong
Regional Site Project Officer
U.S. Envornmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Work Assignment No.: 31-5L73

EPA Contract No.: 68-01-6939

Subject: Work Plan Memorandum for
Skinner Landfill, West Chester, Ohio

Document No: 130-WP1-WM-AKVE-1

Dear Messrs. Bartelt and Wong:

Camp Dresser & McKee Inc. is pleased to submit this Work Plan Memorandum for the Skinner Landfill site located in West Chester, Ohio.

The scope, schedule and cost estimate for initial tasks defined by USEPA for Skinner Landfill have been modified to include both tasks No. 1 and 2. Therefore, both the cost summary and the schedule included in this Work Plan Memorandum reflect the increase in the level-of-effort.

Please note that the costs presented in this memorandum are based on cost data for Roy F. Weston, Inc., and represent direct and indirect costs, without base fee or award fee. The detailed costs and fees will be presented in the Work Plan and will be supported by Optional Forms 60 for each REM II Team firm's participation in the work assignment.

It has been determined that no conflict of interest exists for the Regional and Site Managers for this work assignment. Also, it has been determined that no organization conflict of interest exists for Roy F. Weston, Inc., or Camp, Dress & McKee Inc. Signed conflict of interest statements will be submitted under separate cover.

Mr. Richard Bartelt
Mr. Gene Wong

October 15, 1984

If you have any questions or comments, please contact me.

Very truly yours,

CAMP DRESSER & McKEE INC.

John W. Hawthorne, P.E.
Region V, Manager

Approved:

Approved:

David F. Doyle, P.E.
Technical Operations Manager

Jonathan G. Curtis, P.E.
Finance and Administration Manager

cc: W.R. Topping, Contracting Officer, USEPA
W.M. Kaschak, Project Officer, USEPA

Receipt by EPA Region V Acknowledged: Exceptions Taken

| | | | |
|---|---|---|---|
| Regional Project Officer | Date | Yes | No |
| Regional Site Project Officer | Date | Yes | No |
| Explanation of exceptions attached | | Yes | No |

Routing of Acknowledgement:

Return original to REM II Site Manager - Robert J. Karnauskas

Copies to:
REM II Project Officer - W.M. Kaschak
REM II NPMO - J.G. Curtis

WESTON
DESIGNERS CONSULTANTS
NORTHBROOK OFFICE COURT
SUITE 1502
666 WEST DUNDEE ROAD
NORTHBROOK IL 60062
PHONE 312-498-9090

15 October 1984

Mr. John W. Hawthorne, P.E.
Camp, Dresser and McKee, Inc.
11 E. Adams Street
Chicago, Illinois 60603

Re: Work Plan Memorandum for the
Skinner Landfill Site
Work Assignment No. 31-5L73.0
EPA Contract No. 68-01-6939
Document No. 130-WTP1-WM-

Dear Mr. Hawthorne:

Enclosed is the Work Plan Memorandum for the Skinner Landfill site in West Chester, Ohio. We have identified no substansive exceptions to the scope of work. However, in an effort to facilitate the preparation of project plans to be attached to the work plan and expediting the preparation of the topographic map for the facility, we have estimated a greater level of effort in implementing the initial tasks outlined in this work plan memorandum. We have also modified the order of the assigned tasks in order to conform to the REM II Standard Task Lists. If there are any questions regarding this work, please do not hesitate to contact me.

Very truly yours,

ROY F. WESTON, INC.

James M. Burton for

Robert J. Karnauskas, P.G.
REM II Site Manager

RJK:jts

cc: National Program Managers Office

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WORK PLAN MEMORANDUM

FOR

SKINNER LANDFILL SITE

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

WEST CHESTER, OHIO

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(continued)

WORK PLAN MEMORANDUM

For

SKINNER LANDFILL

For

PREPARATION OF A REMEDIAL INVESTIGATION/FEASIBILITY STUDY

## 1.0 INTRODUCTION

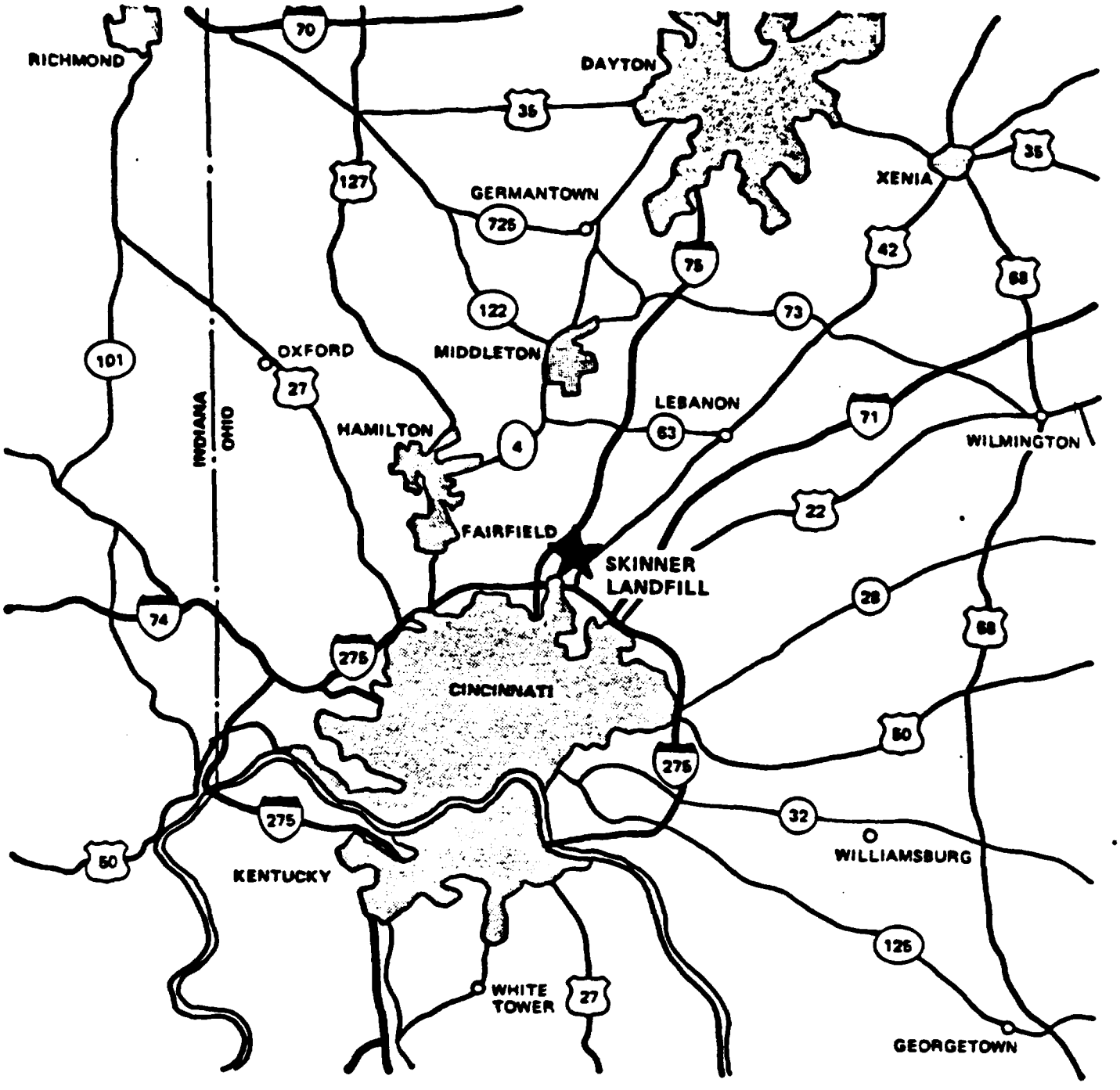
This work plan memorandum describes the tasks to be performed in preparation of the work plan for the Skinner Landfill located near West Chester, Ohio, in accordance with EPA's Work Assignment No. 31-5L73.0.

The Skinner Landfill is a sanitary landfill located approximately 1 mile northeast of the Town of West Chester in Union Township, Butler County, Ohio (Figure 1). See Figure 2 for a location map of the landfill site. The landfill is approximately 50 feet higher than the surrounding terrain and consists of 50 to 70 acres of land; the boundaries are not clearly distinguishable by visual inspection. The initial owners of the landfill were Mr. and Mrs. Albert Skinner and their sons; the present owner is Elsa Skinner, wife of Albert Skinner. The property is bounded on the north and east by wooded land, the south by wooded and agricultural land, and on the west by the Cincinnati-Dayton Road and scattered single-family residences.

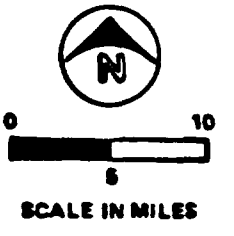
The entire site, including the presently used landfill area, is scattered with debris such as tires, wood, aerosol cans, numerous large tanks, engines, washers, and dryers.

Access to the site is obtained from the Cincinnati-Dayton Road. There is a complex pattern of trailways leading into and through the landfill. One residence is located in the landfill area itself. Refer to the site map (Figure 3) for a general layout of the area.

The site is hidden from the public community by the surrounding trees and other vegetation which appears to be normal and healthy. Trails leading to the six water ponds suggest possible dumping activities or usage of the water. Two intermittent drainages traverse the base of the landfill flowing southwest through the Town of West Chester where they meet to form the East Fork of Mill Creek.

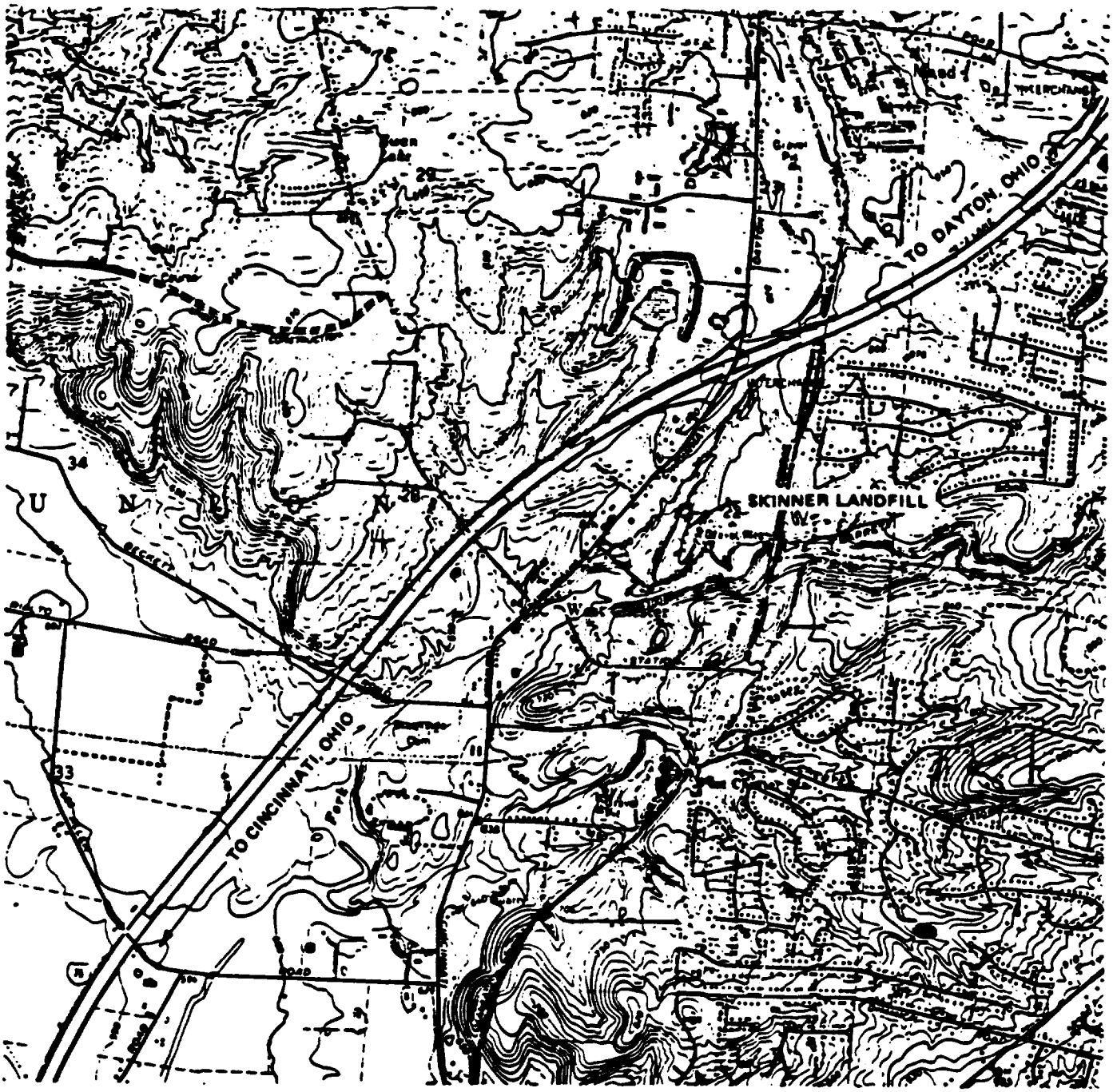







Reference: Skinner Landfill Site - Remedial Action Master Plan May 18, 1983; CH2M-Hill, Inc.

**FIGURE 1**
**VICINITY MAP**
**SKINNER LANDFILL**

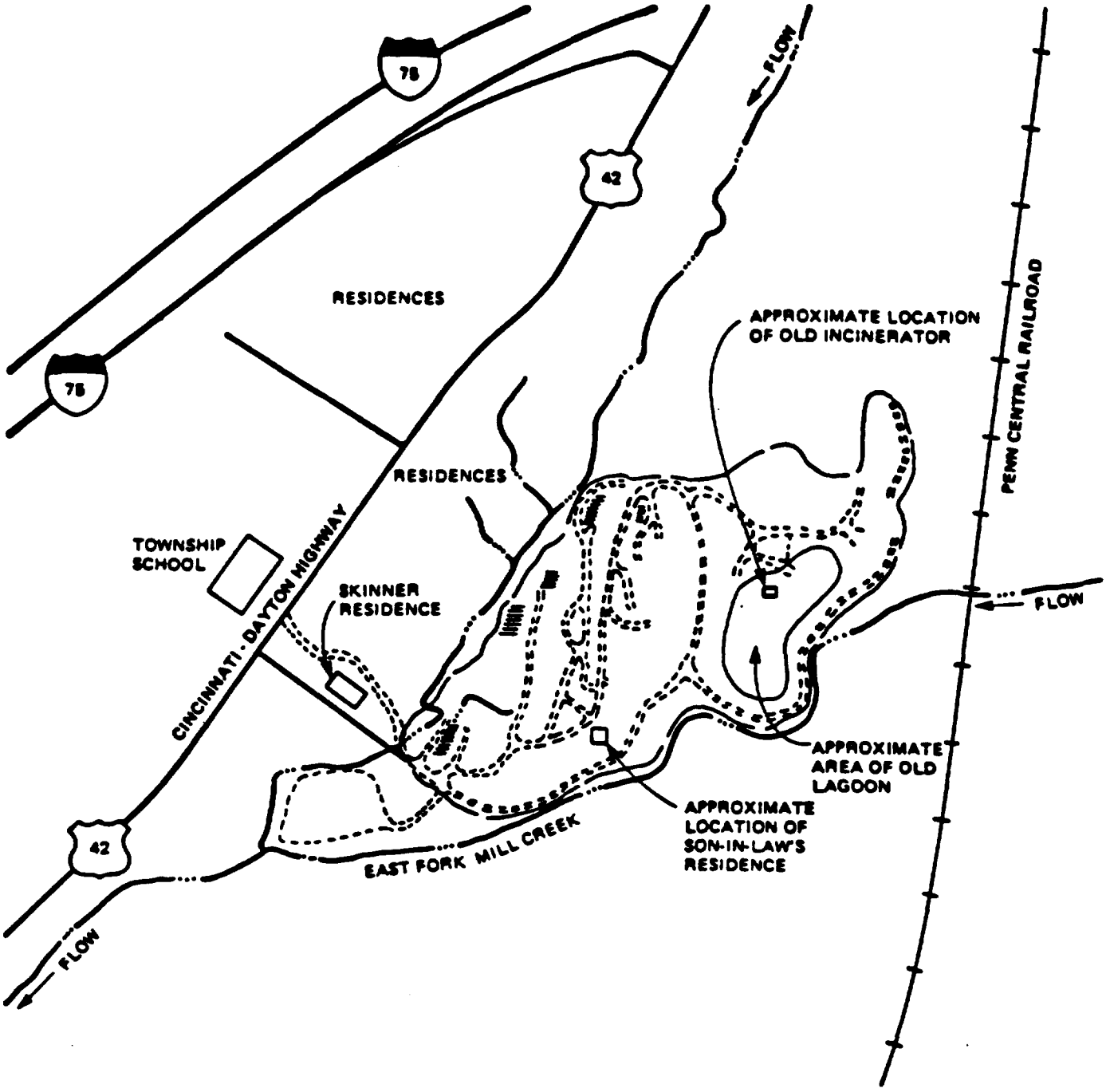



SOURCE: U.S.G.S. 7.5' GLENDALE, OHIO QUADRANGLE.

N

Reference: Skinner Landfill Site - Remedial Action Master Plan
May 18, 1983; CH2M-Hill, Inc.

**FIGURE 2**
**LOCATION MAP**
**SKINNER LANDFILL**




Reference: Skinner Landfill Site - Remedial Action Master Plan
May 18, 1983; CH2M-Hill, Inc.

**FIGURE 3**
**SITE MAP**
SKINNER LANDFILL SITE

From photo analysis, it appears that the land was originally used in the 1930s for the extraction of sand and gravel.

During the next several decades, the Skinners accepted general municipal refuse. As early as 1964, hazardous waste was reportedly accepted at the landfill and cyanide was confirmed to have been disposed of at the site. In 1976, toxic chemicals from the Chem-Dyne Corp. were reportedly placed in the landfill.

The site was never permitted as a municipal landfill and is presently unpermitted. Application for a permit was made but never approved because the area had previously been zoned as a rural residential area. Because the landfill was not permitted, regular inspections were not conducted. Therefore, records concerning the landfill operation are scarce.

In 1977, the landfill operators were charged by Ohio EPA with improperly disposing of hazardous waste material at the site. Approximately 100 drums, allegedly containing industrial and chemical wastes, were photographed on site. In a subsequent court case, in which the Ohio EPA attempted to force the landowners to remove the drums, the presiding judge ruled that the Ohio EPA failed to present sufficient evidence that the drums posed a danger. The same judge did prohibit the landowners from using the facility for future disposal or storage of industrial wastes of any nature except under legal permit.

Another business activity was conducted on site by John Skinner, son of the landfill owners. Beginning in the early 1960s, John Skinner worked for the Chem-Dyne Corporation (now in receivership), cleaning, washing and repairing Chem-Dyne equipment used to haul chemical wastes. This activity apparently began under the auspices of William Kovacs, a vice president of Chem-Dyne Corp. It is unknown when this business began or ended; however, in the court case referred to above, which was tried in October 1978, the presiding judge allowed this activity to continue.

Industrial chemicals from the Chem-Dyne Corporation have reportedly been dumped in an old lagoon area in the landfill. The dumped material consists of drums, broken drums and free standing liquid. The lagoon area was covered with soil from the landfill in 1976 and the limits of the old chemical dump are not presently known. Samples of these chemicals were found to contain toxic concentrations of hazardous chemical substances. Groundwater contamination is a possibility.

Leachate has been reported seeping from the bank in the area of the old lagoon. Surface water contamination of the two streams tnat traverse the base of the landfill is a possibililty.

Numerous storage tanks and 55-gallon drums are scattered throughout the landfill. The contents of these tanks and drums are unknown. During a site visit, the instrument readings in two of the tanks registered high concentrations of organics. It is not known if there are buried drums in areas other than the lagoon area.

Six standing water ponds lie along the western boundary of the landfill. Based on visual inspection, these ponds do not appear to be contaminated. Trucks have been seen backing up to these ponds indicating possible dumping.

To date there have been no remedial actions taken to rectify the problems at the Skinner Landfill site.

(Source: Final Remedial Action Plan prepared by CH2M-Hill, May 1983).

## 2.0 SCOPE OF SERVICES

### Task 0. Prepare Work Plan Memorandum

Objective: Prepare a Work Plan Memorandum describing the tasks to be performed in order to prepare the Work Plan and Project Operations Plans; identify the level of effort (LOE) and associated costs and schedule.

Data Sources:
1. Tasks 1 and 2 of the Skinner Landfill Remedial Investigation and Feasibility Study Statement of Work.
2. Remedial Action Master Plan for Skinner Landfill Site Property Site (1983).
3. REM II Policy and Guidance Procedures.

Deliverables: Work Plan Memorandum

### Task 1. Description of Current Situation

Subtask 1.1 - Obtain and Evaluate Existing Information

Objective: Develop a file of existing available information for use in preparing the Work Plan for the Remedial Investigation (RI) and preparing the Feasibility Study (FS). This task will act as a forum for the kickoff meeting described in the Statement of Work under Activity 1, Task 1.

Date Sources:

1. U.S. EPA Region V file data.
2. Ohio EPA file data.
3. Ohio Department of Health file data.
4. Skinner Landfill - Responsible Party Search, April 1983, EPA Contract No. 68-01-6543.
5. Final Remedial Action Master Plan, Skinner Landfill Site, prepared by CH2M-Hill, May 18, 1983.
6. Southwestern Area Air Pollution Control Agency file data.
7. United States Geological Survey topography maps and geological data.
8. Soil Conservation Service, Soil Survey of Butler County.
9. West Chester/Butler County Skinner Landfill - A Preliminary Hydrogeological Report. Ron St. John, Ohio TDD# FS-3110-4 prepared by Ecology and Environment, Inc., 1981.
10. Ohio Attorney General file data.
11. Report of Geology and Groundwater Resources, West Chester, Butler County, Ohio., J.L. Hosler, Ohio EPA Southwest District Office, April 22, 1982.
12. Groundwater Resources of the Cincinnati Area, Butler and Hamilton Counties, Ohio,

F.H. Klair, Jr.; D.G. Thompson, U.S. Geological Survey Water Supply Paper 999.

13. Butler County Health Department file data.

14. Union Township file data.

15. Local newspapers.

Assumptions:

1. Most of the information discussed above can be obtained from U.S. EPA and Ohio EPA. The agencies listed as data sources will be contacted to see if additional information has been developed since the preparation of the RAMP.

2. U.S. EPA and State agencies will provide access to and furnish additional data required.

3. Site data is valid with respect to QA/QC protocols.

Deliverables: Data gathered as part of Subtask 1.1 will be used to develop the following information which will be included in the Interim Report.

1. List of information obtained to include an updated chronological history of operations and response actions conducted at the site and a listing of all materials known to have been deposited or stored at the site.

2. Description of the nature and extent of the problem at the site with an emphasis on the threat or potential threat to public health and the environment.

3. Description of known or potential problems associated with the existing data, including the identification of data gaps.

4. Description of enforcement activities taken, if any, and actions to identify responsible parties and/or recover costs.

5. A history of public concerns and information on outreach activities at this site.

Subtask 1.2 - Prepare Compiled Site Plan(s) (Maps)

Objective: Prepare a site map based on existing data showing in as much detail as possible the planimetric and topographic features. Location of storage tanks and conglomerated drum locations will be shown if the data is available. Detailed site mapping will be conducted under Subtask 3.1 to be discussed later.

Data Sources: 1. U.S.G.S. information.

2. Existing information developed in Subtask 1.1.

3. Available historic and current aerial photography.

Assumptions: 1. Compiled site plan(s) are primarily for use in conceptualizing the work plan requirements.

Deliverables: The compiled site plan will be part of the Interim Report.

Subtask 1.3 - Perform Initial Site Characterization

Objective: To determine the level of hazard at the site and to determine the scope of additional work required to accurately complete the Work Plan for the Skinner RI/FS.

Data Sources: 1. As listed in Task 1.

2. Initial site visit by REM II team members.

Deliverables: Subtask 1.3 is deliverable as part of the Interim Report.

Task 2. Prepare Project Operations Plans

Objectives: To prepare those project plans necessary for the execution of the work and to ensure that the work is conducted in a consistent manner that satisfies the reviewing and using agencies' requirements prior to execution.

Date Sources:

1. Information collected from site files compiled in Task 1 and an initial site inspection.
2. REM II Guidance Documents.
3. Region V directives and procedures.
4. State and local directives and procedures
5. U.S. EPA-approved REM II Health and Safety Assurance Manual.
6. Quality Assurance Program Plan for Performance and Remedial Response Activities of Uncontrolled Hazardous Waste Sites.
7. User's Guide to the Contract Laboratory Program--U.S. EPA, July 1984.

Assumptions:

1. The REM II approved program plans will form the basis for the respective site specific plans.
2. Laboratory Quality Control will be performed by the Contract Laboratories or the Central Regional Laboratory, as applicable.

Subtask 2.1 Quality Assurance Project Plan (QAPP)

A site-specific QA Project Plan will be developed in accordance with U.S. EPA Region V Quality Assurance Project Plan Guidance and consistent with U.S. EPA's Contract Laboratory Program. Preparation of this document will be tailored to the specific requirements for the project in the field and in the office. Since analysis will be performed by a U.S. EPA Contract Laboratory or the Central Regional Laboratory, the analytical QA/QC

will be performed by the analytical laboratory and monitored by the Region V Central Regional Laboratory. The Table of Contents from a typical QAPP is shown in Figure 2-1.

Deliverables: Quality Assurance Project Plan

Subtask 2.2 Health and Safety Plan

A site -specific health and safety plan (Safety Evaluation Form) will be prepared for approval, using input from Task 1. The plan will include:

1. Personnel protective equipment requirements, keyed to generalized site location and activity.

2. Safety equipment inventory.

3. Training requirements.

4. Medical surveillance program.

5. Specific medical procedures, as appropriate.

6. Personnel hygiene requirements.

7. Contingency plan and emergency procedures.

8. Site personnel/activity safety monitoring program.

9. Decontamination procedures.

The plan will be organized to apply to all RI field work.

Deliverables: Safety Evaluation Form

Subtask 2.3 Sampling and Analysis Plan

A site-specific sampling and analysis plan based on the findings of the initial investigations phase and the Statement of Work will be developed. Table 2-2 summarizes the sampling required by the Statement of Work. The plan will include sampling and analytical require-

TABLE 2-1

QUALITY ASSURANCE PROJECT PLAN
TABLE OF CONTENTS

TABLE 2-2

SAMPLING AS REQUIRED
IN THE
SKINNER LANDFILL SITE
REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
STATEMENT OF WORK

| ACTIVITY | TASK | SAMPLED ITEM(S) | NUMBER OF SAMPLES | ANALYSIS |
|---|---|---|---|---|
| 2 | 4 | Drums and Storage Tanks-70 | 82 | Organic and Inorganic Data Pkg.. |
| 3 | 2 | Ground Water Monitoring Wells-11 | 11 | Organic and Inorganic Data Pkg. |
| | 3 | Residential Wells-14 | 26 | Organic and Inorganic Data Pkg. |
| | 4 | Surface Water-12 Locations | 33 | Organic and Inorganic Data Pkg. |
| | 4 | Sediment-12 Locations | 33 | Organic and Inorganic Data Pkg. and EP Toxicity (If necessary) |
| | 5 | Soil-20 borings, 3 monitoring wells and 15 surface samples | 50 | Organic and Inorganic Data Pkg. and EP Toxicity (If necessary) |
| | | Total Number of Samples | 235 | |

1. Includes blanks and duplicates

ments. The RI/FS program will include sampling of air, soil, surface water, sediment and groundwater. The Site Manager will request all raw data from the Central Regional Laboratory and will provide a separate and independent evaluation of this data. Procedures for this independent verification will be identified in the Sampling and Analysis Plan.

Subtask 2.4 Site Management Plan

A plan detailing project operations at the site, including site access and security, contingency plans for other than site personnel, and the general coordination and operational planning of activities to be performed at the site will be developed.

Subtask 2.5 Quality Control (QC) Plan

There are two Quality Analysis/Quality Control protocols that apply to the Skinner Landfill site: a Quality Control Plan that governs office work and deliverables, and a site specific Quality Assurance Project Plan that covers field and laboratory work. The types of reviews included in the QC Plan are shown in Table 2-3. As part of the Work Plan, a site-specific list of deliverables and reviews will be prepared. An example that applies to this memorandum is included as Attachment D. The QAPP for field and laboratory work are discussed in Subtask 2.1. All field analyses and sample collection shall be done in accordance with accepted operating procedures and chain-of-custody procedures as provided by the U.S. EPA and Ohio EPA.

Subtask 2.6 Data Management Plan

A Data Management Plan will be prepared as part of the Project Operations Plan

TABLE 2-3

TYPES OF QUALITY
CONTROL REVIEWS

QCP ACTIVITIES LEGEND

A. Single Person Review & Signoff

1. Supervisor
   a. Regional Manager
   b. Health & Safety Manager
   c. Technical Operations Manager
   d. Finance & Administration Director

2. Peer Review & Signoff*

3. Technical Expert Review & Signoff*
   (Identify individual, provide resume & schedule time)

B. Committee Review & Signoff

1. Assembled committee

2. Blind committee
   (appropriate technical disciplines must be identified, resume provided, chairman identified & time scheduled)

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* Signoff consists of approval signature block on the transmittal page of the deliverable signed and dated by the responsible party(ies) or committee chairman prior to electronic submittal to the NPMO for approval for release to the U.S. EPA region

for internal use to guide the efficient management of the large quantity of data which will result from this assignment. This plan will include:

1. Data recording/gathering format.

2. Data file type and location.

3. Data file control assignment (by individual) and sign-out procedure.

4. Procedures/timing for return of information to file (e.g., no data left at work station overnight).

5. Back-up file procedures, requirements, locations, and updating periods.

Standardized REM II Team procedures will form the basis for Data Management Plan development and usage.

Subtask 2.7 Community Relations Plan

Participation in Community Relations will be discussed in the work plan.

Deliverables: None.

Task 3. Perform EPA Designated Activities

Subtask 3.1 Perform Site Mapping

Objective: Prepare a site base map(s) in sufficient detail to show pertinent planimetric and topographic features of the site. Special emphasis will be given to show storage tanks and conglomerated drum location. Off-site areas will be included in the mapping to allow for evaluation of surface drainage and possible off- site effects.

Data Sources: 1. U.S.G.S. information.

2. Existing information developed in Subtask 1.2.

3. Control survey and aerial photography to be conducted as part of this subtask. Aerial photography will include infrared and stereoscopic photography if it is determined to be of value.

Deliverables: Site maps.

Task 4. Prepare Work Plan

Subtask 4.1 Prepare Draft Work Plan

Objectives: Prepare a Draft Work Plan for the Remedial Investigation/Feasibility Study (RI/FS), using the results and outputs of Task 2 (Prepare Project Plans) and an evaluation of investigative activities required at the site. A consolidated draft work plan document will be prepared including estimated schedules and budgets.

Data Sources:
1. Interim Report and Project Plans (Task 2).
2. REM II Guidance Documents.
3. Remedial Action Master Plan (1983).
4. Skinner Landfill Remedial Investigation and Feasibility Study Statement of Work.

Assumption:
1. The Draft Work Plan will be based on the statement of work and the results of the preceding Tasks.

Deliverables:
1. Consolidated Draft Work Plan including estimated Budgets and Schedules for the RI/FS addressing on-site contamination for air, soils, sediments, groundwater, surface water, vegetation and local water supply wells.
2. The Draft Work Plan will include specific, discrete tasks to be performed under each phase of work. The plan will include the items listed below:

- o Introduction
- o Background of Site
- o Work Scope
- o Technical Approach
- o Detailed Site Topographic Mapping including:
  - Property boundaries, owners, well locations
  - Monitoring well locations and elevations
  - Topography indicating two foot contours
  - Disposal/contamination areas
  - Sample collection locations
  - Test pit and soil boring locations
  - Land use
  - Water table elevations (groundwater flow directions)
- o Site Investigations, including:
  - Waste characterization (if necessary)
  - Air quality investigation
  - Soil/sediment investigation
  - Geophysical investigation
  - Groundwater/hydrogeologic investigation
  - Surface water investigation
  - Investigation of water supply wells
  - Biological investigation
- o Endagerment Assessment
- o Description of Remedial Response
- o Response objectives and criteria
- o Identification of Remedial Alternatives
- o Identification of appropriate technology
- o Specific Engineering considerations (i.e., pilot facilities)
- o Laboratory Studies, as appropriate
- o Evaluation of Alternatives, including
  - Risk assessment
  - Cost evaluation

- Cost effectiveness methodology for analysis of alternatives
- Recommendation of selected alternative

o Conceptual Design/Final Report
o Community Relations
o Schedule
o Budget
o Deliverables
o Appendix

- CPM diagram
- Project plans

Subtask 4.2 - Agency Review

Objective: To provide agency input and concurrence to the work plan.

Information Sources: Not applicable

Subtask 4.3 - Prepare Final Work Plan

Objectives: Produce documents to direct the Skinner Landfill Site RI/FS incorporating appropriate agency, industry, and public comments as provided in writing by EPA.

Data Sources: 1. Draft Work Plan (Subtask 4.1) and results of Public Scoping meeting (Subtask 4.2).

Assumption: EPA will indicate which comments from the public scoping meeting are to be incorporated into the Final Work Plan.

Deliverable: Final Work Plan

Task 5. Technical and Financial Management

Objective: Prepare technical and financial reports, attend meetings, perform QA/QC audit, evaluate laboratory reports, perform document control, etc.

Data Sources:
1. Results of Task 0 through Task 4
2. Federal, State and Local Agencies
3. Management information system established for the REM II Contract (REMIS)

Assumptions:
1. Monthly reports will be prepared during the initial period in conformance with standard monthly report format
2. Monthly progress meetings will be required during the initial period

Deliverables: Monthly Progress Reports

## 3.0 BUDGET

The costs associated with the initial tasks are presented in Attachments A and B. Attachment A presents a summary of all costs associated with the initial tasks and Attachment B presents a detailed breakout of labor by category and task expenses and other direct costs (ODCs) by task. These costs are in accordance with our understanding of the requirements of this project.

## 4.0 SCHEDULE

The Schedule of Activities by task and subtask is presented in Attachment C. As shown, we estimate that the final Work Plan will be completed the week of December 24, 1984.

The Schedule of Deliverables is presented in Attachment D and shows distribution and approval dates. We have not included distribution to any idnetified potential responsible parties; we look to your guidance in these areas.

We have also included an Initial Tasks Flow Chart as Attachment E to present graphically the interrelationship tasks and generalized flow of information.

## 5.0 KEY STAFF

1. Robert J. Karnauskas, P.G., Roy F. Weston, Inc. will be the site manager for the Skinner Landfill site assignment. His resume is included as Attachment F.

2. John W. Hawthorne, P.E., Camp Dresser & McKee, is the Region V Manager.

3. Camp Dresser & McKee will provide direction and input on health and safety, quality assurance and on specific tasks as required.

4. ICF will provide direction and input into the Community Relations Plan.

5. Clement Associates will provide guidance on the exposure and risk assessment and on the endangerment assessment.

6. C.C. Johnson and Associates will provide input on a task specific basis.

# ATTACHMENT A

REM II
# FIRM LEVEL

WA Code 31-5L73.0

WA Manager Name Karnauskas

SSAN 326-46-4170

Site Number 130

Site Name Skinner

Phase WP1

Firm RFW

Start Date 9/26 (4)

End Date 12/28 (5)

| TASK | Professional Hours | Professional $ | Support Hours | Support $ | Equipment $ | Travel $ | ODC's $ | Sub-Pool $ | Indirect $ | Total $ |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 Work Plan Memo | 78 | 3684 | 12 | 277 | 100 | 60 | 260 | | | 4381 |
| 1.0 Current Sit'n | 210 | 8275 | 32 | 739 | 300 | 1890 | 820 | | | 12024 |
| 2.0 Project Plans | 280 | 11225 | 58 | 1339 | | 100 | 1070 | | | 13734 |
| 3.0 EPA Activities | 56 | 2408 | 16 | 369 | 100 | 540 | 370 | 6000* | | 9787 |
| 4.0 Work Plan | 360 | 14117 | 88 | 2031 | | 85 | 1550 | | | 17783 |
| 5.0 Tech/Fin. Mgmt | 74 | 4694 | 64 | 1696 | | 85 | 220 | | | 6695 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| TOTAL | 1058 | 44403 | 270 | 6451 | 500 | 2760 | 4290 | 6000 | | 64404 |
| IJS.FIRM WA==> | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (2) |

REM II

# ATTACHMENT B

# LABOR

Site Number: 130 Phase: WP1 Site Manager: R.J. Karnauskas Date: 10/12/84

Site Name: Skinner Landfill WA Code: 31-5L73.0 SSAN: 326-46-4170

| TASK ELEMENT | Professional 4 $/Hr. | | Professional 3 $/Hr. | | Professional 2 $/Hr. | | Professional 1 $/Hr. | | Technical 2 $/Hr. | | Technical 1 $/Hr. | | TOTAL TECHNICAL LOE | | Clerical 3 $/Hr. | | Clerical 2 $/Hr. | | Clerical 1 $/Hr. | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hours | 70.31 | Hours | 48.98 | Hours | 36.36 | Hours | 26.26 | Hours | 24.20 | Hours | $ | Hours | $ | Hours | 28.55 | Hours | 23.09 | Hours | $ | Hours | $ |
| 0.0 Work Plan Memo | 22 | 1547 | 8 | 392 | 48 | 1745 | | | | | | | 78 | 3684 | | | 12 | 277 | | | 90 | 3961 |
| 1.0 Current Situation | 14 | 984 | 36 | 1763 | 136 | 4945 | | | 24 | 583 | | | 210 | 8275 | | | 32 | 739 | | | 242 | 9014 |
| 2.0 Project Plans | | | | | | | | | | | | | | | | | | | | | | |
| 2.1 Proj. Opn. Plans | | | | | | | | | | | | | | | | | | | | | | |
| 21.1 Health & Safety | 2 | 141 | 2 | 98 | 8 | 291 | | | | | | | 12 | 530 | | | 2 | 46 | | | 14 | 576 |
| 21.2 Sampling Plan | 16 | 1125 | 40 | 1959 | 80 | 2909 | | | 32 | 777 | | | 168 | 6270 | | | 24 | 554 | | | 192 | 2324 |
| 21.3 Site Mgmt. | | | 2 | 98 | 32 | 1164 | | | | | | | 34 | 1262 | | | 8 | 185 | | | 42 | 1447 |
| 21.4 Quality Control | | | 2 | 98 | 4 | 145 | | | | | | | 6 | 243 | | | 4 | 92 | | | 10 | 335 |
| 2.2 QAPP | 2 | 141 | 4 | 196 | 8 | 291 | | | | | | | 14 | 628 | | | 8 | 185 | | | 22 | 813 |
| 2.3 Data Mgmt | | | 2 | 98 | 16 | 582 | | | | | | | 18 | 680 | | | 4 | 92 | | | 22 | 772 |
| 2.4 Comm. Rel'ns. | 2 | 141 | 2 | 98 | 24 | 873 | | | | | | | 28 | 1112 | | | 8 | 185 | | | 36 | 1297 |
| 3.0 EPA Des. Act. | 8 | 562 | 8 | 392 | 40 | 1454 | | | | | | | 56 | 2408 | | | 16 | 369 | | | 72 | 2777 |
| 4.0 Work Plan | | | | | | | | | | | | | | | | | | | | | | |
| 4.1 Draft | 20 | 1406 | 40 | 1959 | 120 | 4363 | | | 80 | 1942 | | | 260 | 9670 | | | 60 | 1385 | | | 320 | 11055 |
| 4.2 Agency Review | 8 | 562 | 16 | 784 | 16 | 582 | | | | | | | 40 | 1928 | | | 4 | 92 | | | 44 | 2020 |
| 4.3 Final | 4 | 281 | 16 | 784 | 40 | 1454 | | | | | | | 60 | 2519 | | | 24 | 554 | | | 84 | 3073 |
| 5.0 Tech/Fn Mgmt | 50 | 3516 | 24 | 1176 | | | | | | | | | 74 | 4694 | 40 | 1142 | 24 | 554 | | | 138 | 6390 |
| TOTAL | 148 | 10406 | 202 | 9895 | 572 | 20798 | | | 136 | 3302 | | | 1058 | 44403 | 40 | 1142 | 230 | 5309 | | | 1328 | 50854 |

IJS:TASK.FRM

REM II

# EXPENSES

# ATTACHMENT B-1

Site Number: 130

Site Name: Skinner

Phase: WP1

WA Code: 31-5L73.0

Site Manager: Karnauskas

SSAN: 326-46-4170

Date: 10/12/84

| TASK | Equipment $/day Days | Equipment $/day $ | Per Diem $90/day Days | Per Diem $90/day $ | Transportation $ | Sub-Pool $ | G & A* 0.0% $ | Total $ |
|---|---|---|---|---|---|---|---|---|
| 0.0 Work Plan Memo | 1 | 100 | | 30 | 30 | | | 160 |
| 1.0 Current Sit'n | 3 | 300 | 6 | 540 | 1350 | | | 2190 |
| 2.0 Project Plans | | | | 25 | 75 | | | 100 |
| 3.0 EPA Act. 1 | 1 | 100 | 1 | 90 | 450 | 6000* | | 6640 |
| 4.0 Work Plan | | | | 25 | 60 | | | 85 |
| 5.0 Tech/Fin. Mgmt | | | | 25 | 60 | | | 85 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| TOTAL | | 500 | | 735 | 2025 | 6000 | | 9260 |

E:WA.EXP

*EST.

* Subcontractor pool excluded from G&A computation

REM II
ODC's

# ATTACHMENT B-2

Site Number: 130

Site Name: Skinner

Phase: WP1

WA Code: 31-5L73.0

Site Manager: Karnauskas

SSAN: 326-46-4170

Date: 10/12/84

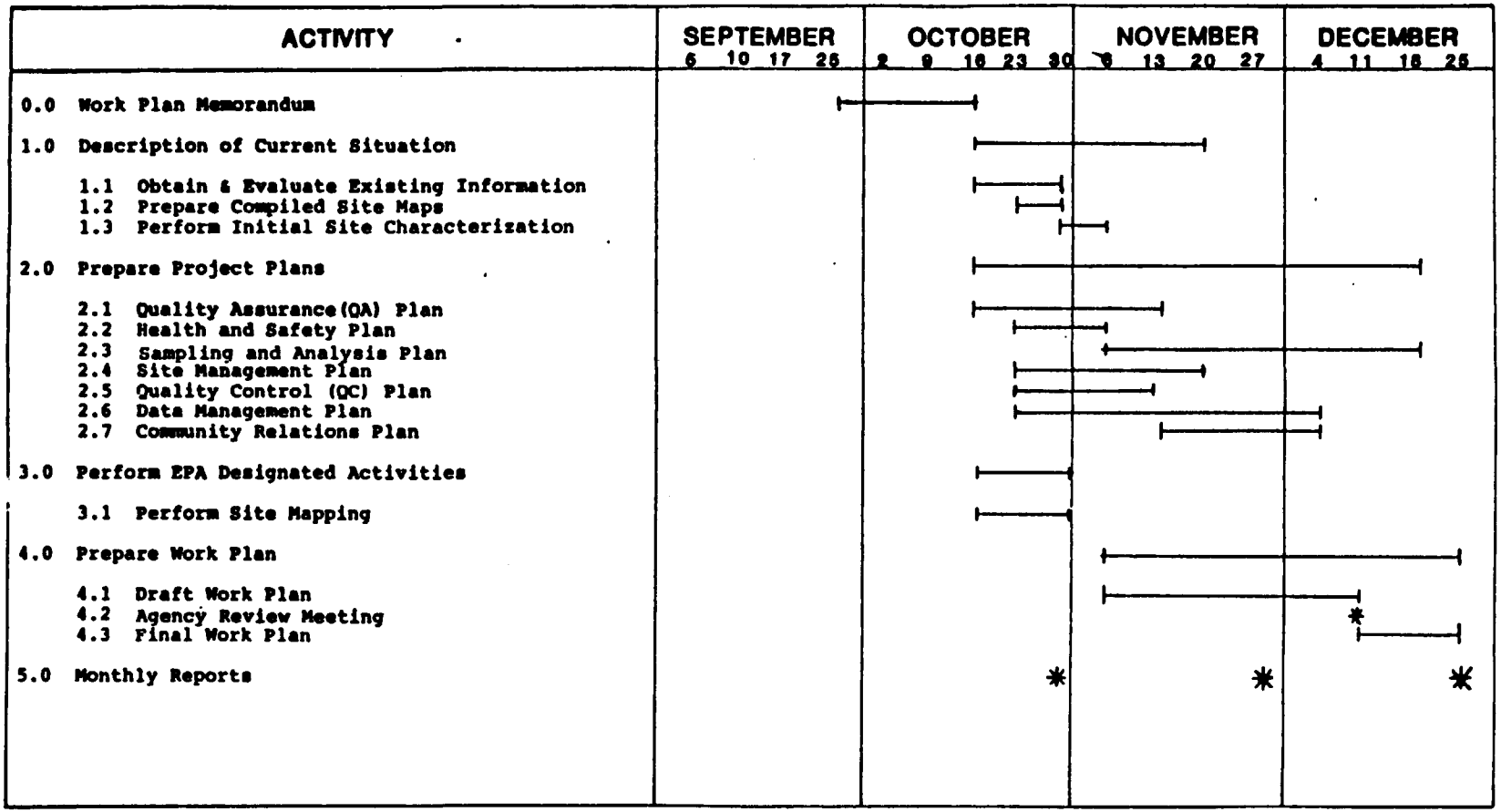
| TASK | Xerox $ | Blue-prints $ | Mail/ Courier $ | Supplies $ | Tele-phone $ | Computer $ | | G & A $ | TOTAL $ |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 Work Plan Memo | 100 | | 50 | 10 | 50 | 50 | | | 260 |
| 1.0 Current Sit'n | 300 | 100 | 100 | 100 | 100 | 120 | | | 820 |
| 2.0 Project Plans | 500 | 100 | 100 | 100 | 20 | 250 | | | 1070 |
| 3.0 EPA Activities | 50 | 100 | 50 | 100 | 20 | 50 | | | 370 |
| 4.0 Work Plan | 500 | 500 | 100 | 100 | 50 | 300 | | | 1550 |
| 5.0 Tech/Fin. Mgmt. | 100 | | 20 | | 50 | 50 | | | 220 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| TOTAL | 1550 | 800 | 420 | 410 | 290 | 820 | | | 4290 |

E:WA.ODC

# SCHEDULE OF ACTIVITIES

ATTACHMENT C

## SKINNER LANDFILL SITE, WEST CHESTER, OHIO



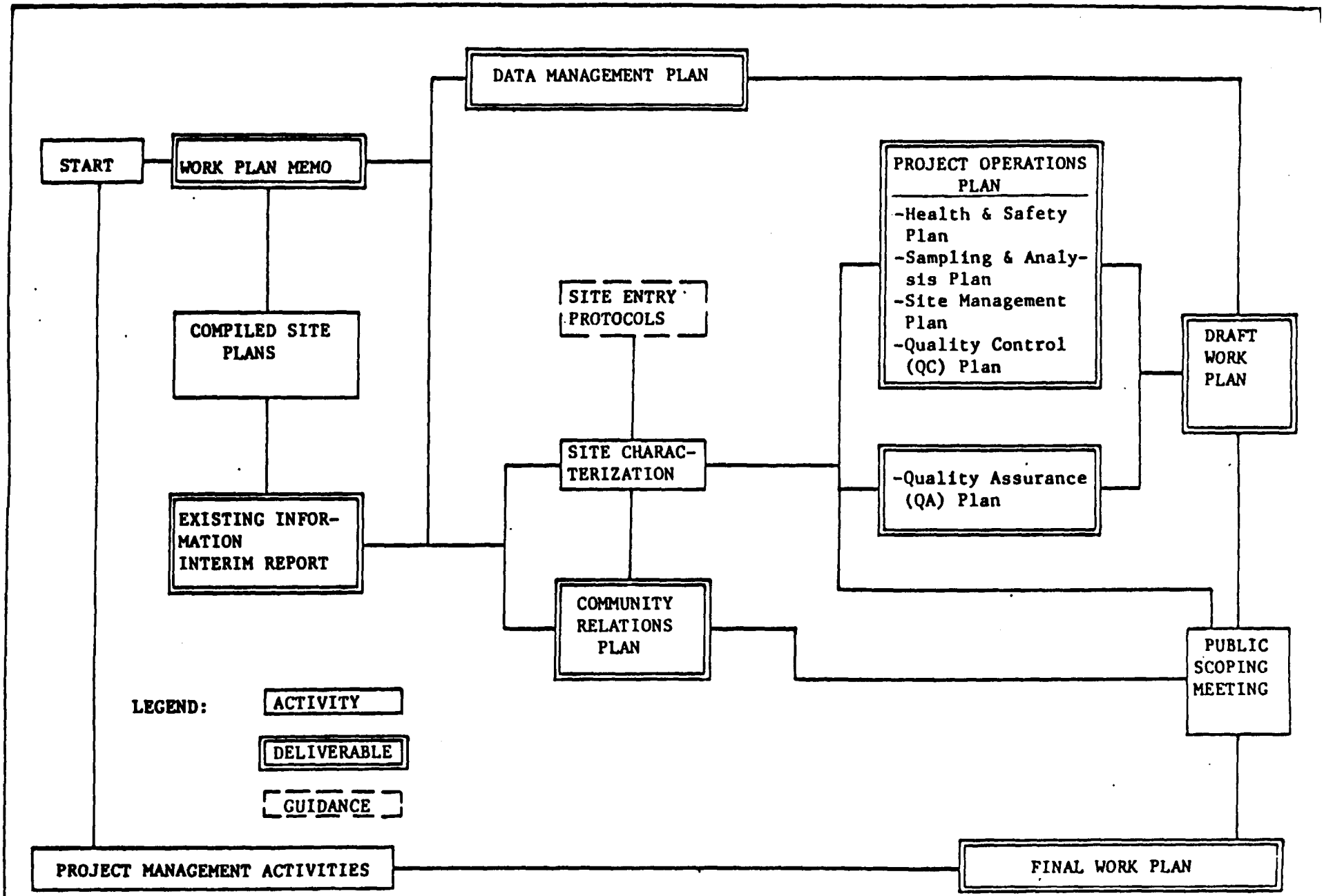
# SCHEDULE OF DELIVERABLES

# ATTACHMENT D

## SKINNER LANDFILL SITE, WEST CHESTER, OHIO

| DELIVERABLE | WORK ASSIGNMENT | | QUALITY CONTROL PLAN (QCP) | | QUALITY SURVEILLANCE | | REM II APPROVAL | | | | | USEPA REVIEW | | | | | STATE REVIEW | | OTHER REVIEW | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUTH. | DUE | ACTIVITY | DATE | ACTIVITY | DATE | RM | TOM | HSM | FAM | | PO | CO | RPO | RSPO | RCO | OHIO EPA | | | |
| Work Plan Memorandum | 9-26 | 10-16 | A.1.a | 10-9 | | | 10-9 | 10-12 | 10-12 | 10-12 | | 10-19 | 10-19 | 10-19 | 10-19 | 10-19 | 10-23 | | | |
| Interim Report | 9-26 | 11-21 | A.1.a | 10-14 | | | 10-14 | 11-16 | 11-16 | 11-16 | | 11-23 | 11-23 | 11-23 | 11-23 | 11-23 | 11-27 | | | |
| Quality Assurance Plan | 9-26 | 11-14 | A.1.a | 11-7 | | | 11-7 | 11-9 | 11-9 | 11-9 | | 11-16 | 11-16 | 11-16 | 11-16 | 11-16 | 11-20 | | | |
| Health & Safety Plan | 9-26 | 11-7 | A.1.b | 11-2 | | | 10-31 | 11-2 | 11-2 | 11-2 | | 11-9 | 11-9 | 11-9 | 11-9 | 11-9 | 11-13 | | | |
| Draft Sampling & Anal. Plan | 9-26 | 11-28 | A.1.c | 11-23 | | | 11-20 | 11-23 | 1-23 | 11-23 | | 11-30 | 11-30 | 11-30 | 11-30 | 11-30 | 12-3 | | | |
| Final Sampling & Anal. Plan | 9-26 | 12-19 | A.1.a | 12-12 | | | 12-12 | 12-14 | 12-14 | 12-14 | | 12-21 | 12-21 | 12-21 | 12-21 | 12-21 | 12-26 | | | |
| Site Management Plan | 9-26 | 11-21 | A.1.c | 11-16 | | | 11-13 | 11-16 | 11-16 | 11-16 | | 11-23 | 11-23 | 11-23 | 11-23 | 11-23 | 11-27 | | | |
| Quality Control Plan | 9-26 | 11-14 | A.1.a | 11-7 | | | 11-7 | 11-9 | 11-9 | 11-9 | | 11-16 | 11-16 | 11-16 | 11-16 | 11-16 | 11-20 | | | |
| Data Management Plan | 9-26 | 12-5 | A.1.a | 11-28 | | | 11-28 | 11-30 | 11-30 | 11-30 | | 12-7 | 12-7 | 12-7 | 12-7 | 12-7 | 12-11 | | | |
| Community Relations Plan | 9-26 | 12-5 | A.1.a | 11-28 | | | 11-28 | 11-30 | 11-30 | 11-30 | | 12-7 | 12-7 | 12-7 | 12-7 | 12-7 | 12-11 | | | |
| Site Map | 9-26 | 10-31 | A.1.a | 10-24 | | | 10-24 | 10-26 | 10-26 | 10-26 | | 11-2 | 11-2 | 11-2 | 11-2 | 11-2 | 11-6 | | | |
| Draft Work Plan | 9-26 | 12-13 | B.1 | 11-30 | | | 12-6 | 12-10 | 12-10 | 12-10 | | 12-15 | 12-15 | 12-15 | 12-15 | 12-15 | 12-19 | | | |
| Final Work Plan | 9-26 | 12-28 | A.1.a | 12-21 | | | 12-21 | 12-27 | 12-27 | 12-27 | | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 1-7 | | | |
| Monthly Reports | 9-26 | on going | A.1.a | | | | | | | | | | | | | | | | | |

SI minor 2/11/85
QAPP 3/19/85
SAP 3/19/85
H&SP 4/2/85
SMP 4/2/85
4/9/85 CR & Draft up 4/16/85
Final 5/14/85




# ATTACHMENT E

INITIAL TASKS FLOW CHART

# ATTACHMENT F

## Robert J. Karnauskas, P.G.

### Registration

Certified Professional Geological Scientist and Certified Professional Geologist in the state of Indiana.

### Fields of Competence

Geological aspects relating to locational and design considerations of solid and hazardous waste disposal facilities; evaluation of organic and inorganic groundwater contamination problems; aquifer restoration and rehabilitation; land disposal of municipal and industrial wastewaters and sludges; physical and chemical characterization of industrial waste materials to assess groundwater contamination potential; groundwater modeling; evaluation of hydrogeologic aspects of construction problems; and NPDES permit program coordination.

### Experience Summary

Six years of professional experience in consulting environmental engineering. Project assignments have blanketed a broad range of industries including pulp and paper, solvent processing and recycling, electric power utilities, food processing, private and public solid waste operations, foundries, and agriculture. Experience includes the hydrogeologic evaluation of a wide variety of subsurface environments and groundwater contamination concerns. Research experience has included the evaluation of leachate characteristics from municipal and industrial wastes as well as the development of methods for assessing leakage rates from industrial wastewater lagoons.

### Credentials

B.A., Geology and Geophysics—University of Wisconsin, Madison (1975)

M.S., Geology (Hydrogeology)—University of Wisconsin, Madison (1977)

M.S., Water Resources Management—University of Wisconsin, Madison (1977)

University of Wisconsin, Madison—Part-time graduate studies in Business Management (1983)

National Water Well Association, Technical Division

American Institute of Professional Geologists

### Employment History

| | |
|---|---|
| 1983-Present | WESTON |
| 1977-1983 | Warzyn Engineering Inc. |

### Key Projects

Project Hydrogeologist and/or Project Manager for several major fly ash disposal facilities for Wisconsin Electric Utilities, including site selection, subsurface feasibility evaluations, technical input to engineering design, construction and groundwater monitoring.

Project Hydrogeologist and Project Manager on a major groundwater contamination study of private water supply wells from cheese manufacturing waste processes. Scope of work included identification, evaluation and mitigation of groundwater contaminant sources.

Project Hydrogeologist for the subsurface evaluation and design of a major county zone of saturation landfill, including expert testimony at regulatory licensing hearings.

Designed a detailed test monitoring area within a large fly ash disposal facility to evaluate leachate quality and quantity generated within and leaving the facility. The test program is designed to compare field results with predicted leachate quality and environmental impacts from laboratory characterization of the ash.

Project Manager on a detailed subsurface investigation evaluating PCB contamination in soils and groundwater.

Project Hydrogeologist and Project Manager investigating the scope and magnitude of solvent contamination in soils and groundwater at a solvent reprocessing facility, including liaison with local and state governmental agencies, and public relations.

# Professional Profile

Project Hydrogeologist and Project Manager investigating contamination of a municipal water supply well derived from food processing and canning wastes.

Project Hydrogeologist for a regional groundwater resource evaluation investigating agricultural water use and its effect on process water availability for a Wisconsin paper manufacturer.

## Publications


Karnauskas, Robert J. and M. P. Anderson, "Groundwater Lake Relationships and Groundwater Quality in the Sand Plain Province of Wisconsin—Nepco Lake", *Groundwater Journal*, 1978.

Ham, R. K. and R. J. Karnauskas, "Leachate Production from Milled and Unprocessed Refuse", International Solid Waste Association Information Bulletin, 1974.

Karnauskas, R. J., C. E. R. Lawson and M. E. Horn, "The Feasibility of Fly Ash Utilization for FGD Scrubber Sludge Stabilization, Columbia Generating Station, Portage, Wisconsin". Proceedings of Second Annual Conference of Applied Research and Practice on Municipal and Industrial Waste, 1979.

Karnauskas, R. J. and P. J. Huettl, "Land Application of Whey", *Dairy Field*, May and June, 1981.

ATTACHMENT G

MEMORANDUM:

TO: D.F. Doyle, Manager of Techinal Operations
Camp, Dresser and McKee, Inc.
1 Center Plaza
Boston, Ma 02108

FROM: Robert J. Karnauskas, P.G.

DATE: October 16, 1984

PROJECT: EPA Contract No. 68-01-6939/NPM/MPMO
Document No. 999-PM1-CD-AKTE-1

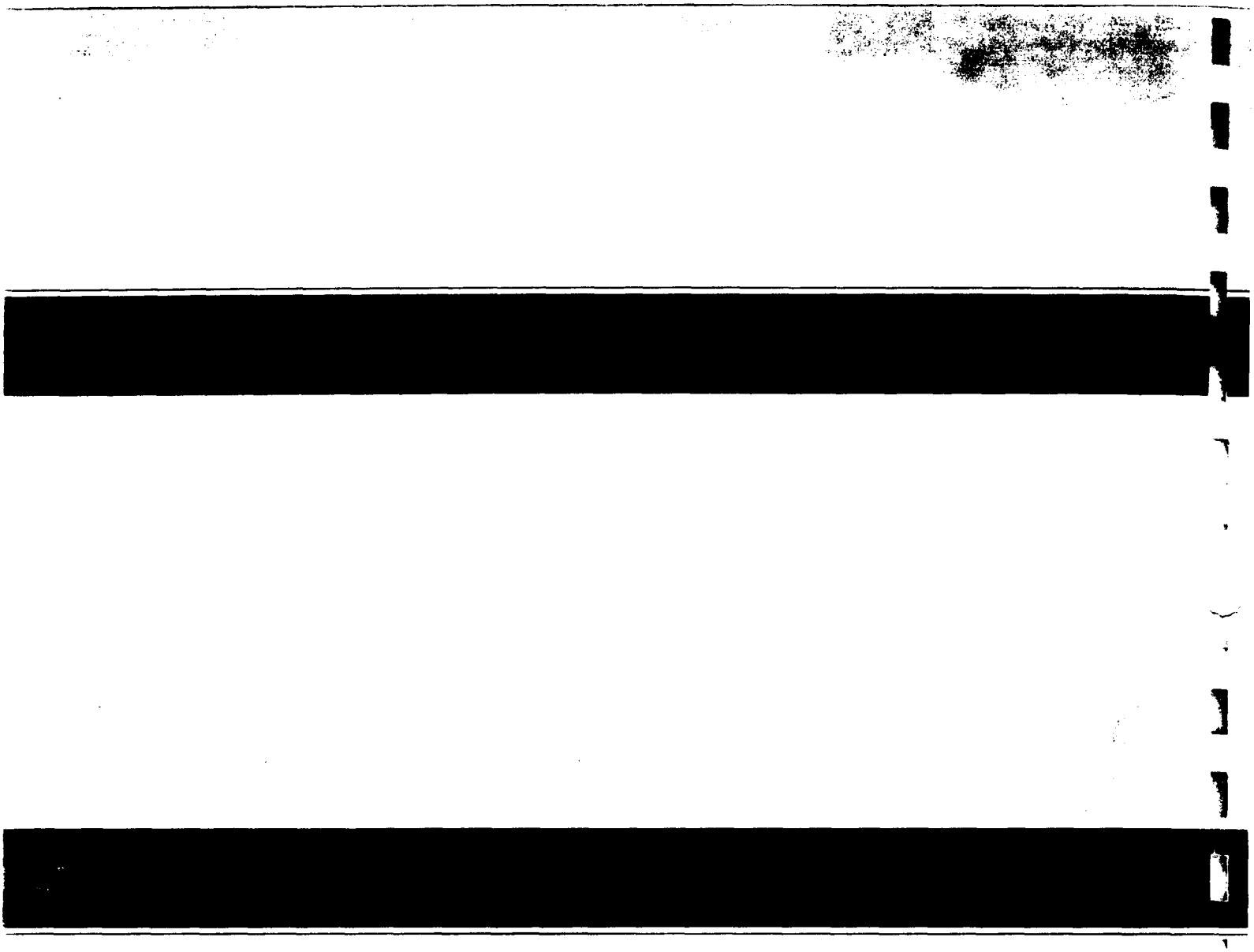
SUBJECT: Staff Conflict of Interest Declaration
Skinner Landfill Site, West Chester, Ohio
Work Assignment No. 31-5L73.0

ACTION: Immediate Response

I have reviewed the above work assignment for the EPA Contract 68-01-6939, Remedial Response Activities of Uncontrolled Hazardous Waste Sites. Based on this review and my understanding of the legal requirements of this work, I certify that I have no known conflict of interest associated with the assignment based on the known potential responsible parties or my past work experience with this site, if any. Also, I understand my professional obligation to inform any staff working at my direction on this assignment of the conflict of interest requirements and insure that such staff have no conflict of interests.

Robert J. Karnauskas, P.G.
REM II Site Manager
Senior Hydrogeologist/Project Manager

cc: J.G. Curtis
Camp, Dresser and McKee, Inc.
7630 Little River Turnpike
Suite 500
Annandale, VA 22003



**CAMP DRESSER & McKEE INC.**
**7630** LITTLE RIVER TURNPIKE
SUITE 500
ANNANDALE, VIRGINIA 22003
703 642-5500